#### ARPA-E FUNDING OPPORTUNITY ANNOUNCEMENT

#### **SUMMARY**

### **Submission**

- Concept paper opening date: 5/12/09 at 8:00 AM EDT
- Concept paper closing date: 6/2/09 at 8:00 PM EDT
- Early submission is strongly encouraged
- Concept papers will be reviewed as received. ARPA-E will notify applicants to submit full proposals as acceptable projects are identified but anticipates that all notifications for full proposal will be made no later than 7/13/09.
- The deadline for submission of full proposals will be 31 days after the date of notification.
- Applicants may submit a full proposal even if the concept paper feedback is unfavorable.

## Transformational energy technologies

- Potential to create new paradigms in how energy is produced, transmitted, used, stored
- High-risk, high-payoff
- Expected operational range is TRL-2 thru TRL-7
- Early-stage: take discovery/invention and determine thru applied research (1) if it can be made sufficiently robust for real-world application and (2) if its real-world performance is sufficient to eventually transition to industry use
- Late-stage: reduce tech risk low enough for industry to invest in development and deployment
- Must support ARPA-E mission:
  - o Enhance US economic and energy security through development of energy technologies that
    - Reduce GHG emissions
    - Reduce dependence on foreign sources
    - Improve energy efficiency
  - o Ensure US maintains technological lead in developing and deploying energy technology
  - o But cannot negatively impact other DOE missions

# **Award Instrument/Funding**

- Grant, cooperative agreement (not CRADA), Technology Investment Agreement
  - o FOA flows into these contracts
- Majority expected to be in \$2M to \$5M range; some as low as \$500K and some as high as \$10M
- Project duration of 24 months preferred; can go out to 36 months

Must be led by university or company, or consortium of both; FFRDCs can only participate as member of a team.

### Participation by DOE labs

- May only participate at as part of a team and MAY NOT LEAD THE TEAM
- Must have authorization letter from cognizant CO
- Must submit work through DOE FWP system (NOT A CRADA)

• Scope of work performed by FFRDC cannot be more significant than scope performed by awardee or remainder of team if consortium effort

# **Participation by Foreign Entity**

- May only participate as part of a team and MAY NOT LEAD THE TEAM
- No more than 25% of any award can be directed to foreign entity(ies) on a project regardless of where work is performed
- A minimum of 90% of work, as defined by total project cost, must be performed on US soil

# **Cost Sharing**

- 20% match for early-stage; 50% match for late-stage
- Funds-in or in-kind; former preferred
- Awardee's cost share must come from non-Federal sources, unless use of funds from Federal source is permitted by law
- Must account separately for costs applied to ARPA-E and other Federal programs

# Recovery Act imposes requirements on use of funds

- "Preserve and create jobs and promote economic efficiency by spurring technological advances...."
- Recipients must use funds in a manner that maximizes job creation and economic benefit
- Labor rates are specified
- Recovery Act funds must be accounted for separately from other Federal funds
- Quarterly reporting (these reporting requirements are separate from the monthly and biannual reporting requirements due to the ARPA-E program manager)
- Information about project will be posted on <a href="https://www.recovery.gov">www.recovery.gov</a>

### **Concept Paper Review**

- Non-Fed reviewers under NDA
- Required to mark proprietary in special way
- Reviewed (in order of importance) for (1) impact on ARPA-E mission; and (2) overall S&T merit
- Applicants may submit a full proposal even if they are not invited to

## **Intellectual Property**

- Bayh-Dole rights to universities and non-profits
- Special waiver granting rights equivalent to Bayh-Dole to companies, so long as they pay at least 20% of costs of project and agree to US manufacture or provide Net Benefits Statement
  - o Class waiver will allow for negotiation of US manufacture requirement
- In general, LANS will retain ownership of inventions made by LANL. However, there may be exceptions, so it is important that we understand the IP provisions of the various award instruments before we agree to participate.